

ABSTRACT

A testing system includes a device independent handling system utilizing removable collets that are customized for various device configurations and provide unique mechanical, thermal and electrical contact to a device-under-test (DUT) without the use of clamps, screws or traditional means of securing a DUT in a test or burn in fixture. The system is designed for automatically loading and positioning each of a plurality of laser diode sub-assemblies, an optical system for automatically receiving each laser diode subassembly from the handling system and automatically performing one or more tests to measure functionality of each laser diode sub-assembly, a detection system for detecting characteristics associated with one or more tests performed by the optical system for each laser diode sub-assembly, and a control system for automatically receiving detected characteristics from the detection system, comparing the detected characteristics to stored expected characteristics for a properly functioning laser diode sub-assembly, and providing control instructions to the optical system based on the comparison. The one or more tests are performed by automatically positioning a lens such that light generated from the laser diode sub-assembly is formed into laser light, and each test measures a desired characteristic of the laser light.